



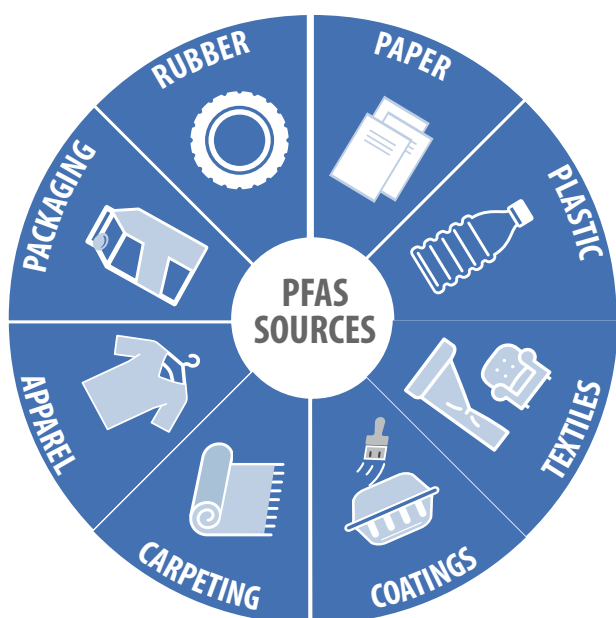
## What are per- and polyfluoroalkyl substances (PFAS)?

A group of man made substances that:

- Do not break down easily
- Stay in the environment for a long time
- Were manufactured and have been used broadly in consumer products since the 1950s
- Mostly enter the environment through people using Class B Aqueous Film Forming Foam (AFFF) to fight oil-based fires, and consumer product waste streams
- Are widely detected in soil, water, and food
- Are linked to human and environmental health risks

## Where do PFAS come from?

PFAS are in many consumer products and firefighting foam. Some PFAS are no longer produced in the United States after being phased out under the U.S. Environmental Protection Agency (EPA) Perfluorooctanoic Acid (PFOA) Stewardship Program. However, other PFAS are produced in the U.S., and many PFAS are still produced internationally and can be imported to the U.S. Products containing PFAS are commonly used and found in the sources shown below.



## Why is LCWD concerned about PFAS?

PFAS levels above the Maximum Contaminant Level (MCL) have been found in many water systems across Massachusetts. PFAS contamination in drinking water is a potential threat to public health. The Massachusetts Department of Environmental Protection (MassDEP) recently issued regulations setting a drinking water standard, or an MCL, for six PFAS added together. The MCL is 20 parts per trillion (ppt) for what the regulations call PFAS6.

PFOS+PFOA+PFHxS+PFNA+PFHpA+PFDA =

# PFAS6

Its maximum contaminant level (MCL) is **MCL=20 ppt**

**1 part per trillion [PPT]**  
=  
a single drop of water in  
**20** olympic-sized swimming pools

## What health risks are linked to PFAS?

Scientific studies suggest potential links between exposure to certain PFAS in the environment and negative health effects. High levels of exposure to some PFAS compounds (above the drinking water standard) may be associated with increased cholesterol, changes in liver enzymes, small decreases in birth weights, decreased vaccine response in children, high blood pressure or pre-eclampsia in pregnant women, and increased risk of kidney or testicular cancer. MassDEP and the Centers for Disease Control and Prevention (CDC) both note more research is needed and ongoing. It is important to remember consuming water with high PFAS levels does not mean that adverse effects will occur.

### QUESTIONS?



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To learn more about PFAS refer to MassDEP's website.

## What sampling efforts has LCWD conducted?

LCWD has four water supply stations that pump water into different parts of the distribution system, each with their own well(s). Each were sampled between September and October 2021.

- Two of the four supply stations detected PFAS6 levels above 20 ppt.
- PFAS6 levels were reported below 20 ppt at Stations 3 & 4.

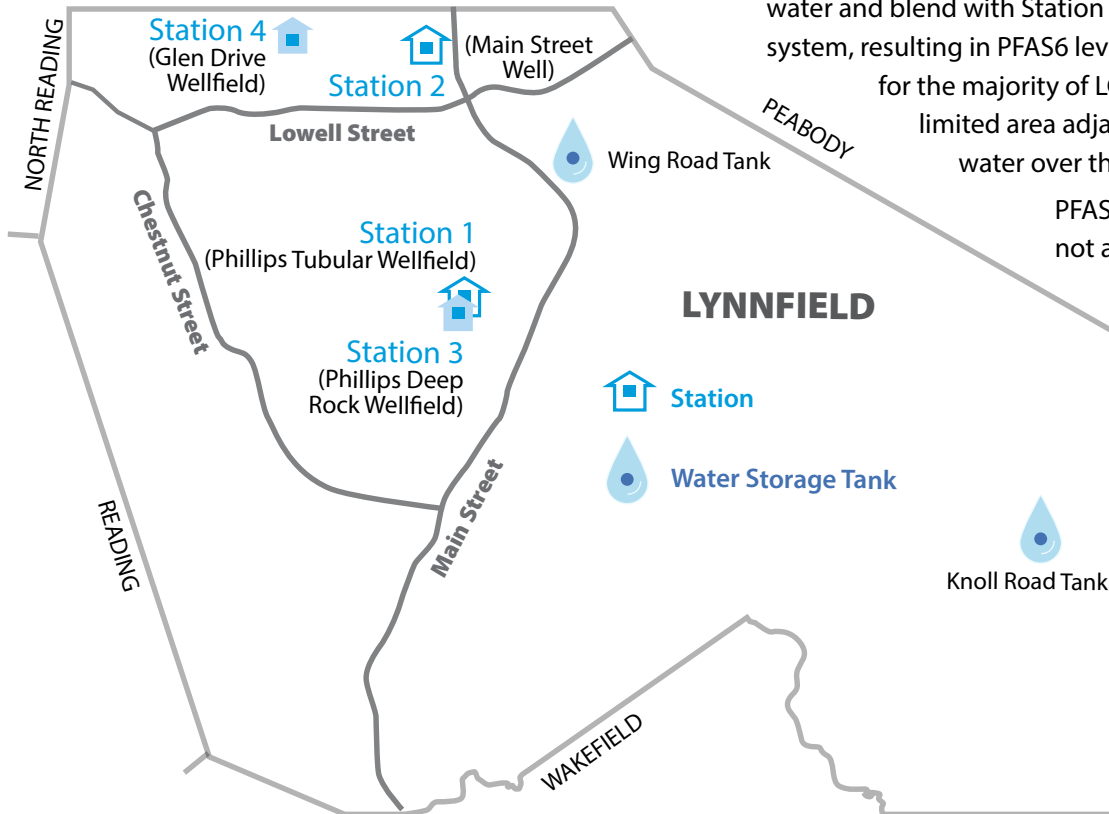
Station	Average PFAS6 Detected
Station 1 Phillips Tubular Wellfield	30.5 ppt
Station 2 Main Street Well	24.3 ppt

It is important to note that LCWD has not had a PFAS6 MCL exceedance at this time. The September and October 2021 samples were initial and confirmatory samples to determine sampling intervals. The average of these values are also compared to a 20 ppt limit. MCL compliance is based on a quarterly average of monthly samples, and therefore the first MCL compliance determination will be based on the fourth quarter monthly results (October, November, and December).

Stations 3 and 4 supply approximately 80 percent of LCWD's water and blend with Station 2 water in the distribution system, resulting in PFAS6 levels below the MCL

for the majority of LCWD's customers. Only a limited area adjacent to Station 2 receives water over the MCL.

PFAS6 levels above the MCLs does not automatically mean there is a public health risk. The MCLs are based on conservative assumptions that consider the populations that could be most affected by PFAS, like lactating women. The MCLs also assume that each person is substantially exposed to PFAS6 from other sources in addition to drinking water.



## What is LCWD doing to proactively handle elevated levels of PFAS?

LCWD is working to reduce PFAS6 in your drinking water.

### We have already taken the following actions:

- ✓ Taken the well with the highest level of PFAS6 (Phillips Tubular Wellfield at Station 1) out of service. That well will remain out of service.
- ✓ Increased production at Stations 3 and 4 to blend with Station 2 (Main Street Well) to maintain a level of PFAS6 below the MCL throughout the whole water system.
- ✓ Committed to continued monitoring of PFAS6 in the water supply.

### We are also investigating further actions, including:

- Short- and long-term treatment options to lower PFAS6 in the water supplied from Main Street Well at Station 2.
- Other operational changes and capital improvement projects to minimize potential PFAS exposure.
- A program for providing an alternative water supply to sensitive populations.

For further information a FAQ sheet is available at Town Hall, the Library, or online at LCWD.us

### LCWD has a WaterSmart portal!

Track your water use and spending, find tips on water conservation, and receive alerts and notifications.

